### HMA PAVING REINFORCING REBAR PERFORMANCE VS COST COMPARISON

**Increasing the Performance of an HMA Pavement**

<table>
<thead>
<tr>
<th>Pavement Condition</th>
<th>Distress</th>
<th>Reinforcing Type</th>
<th>Installed Cost</th>
<th>Added HMA Needed</th>
<th>HMA Cost</th>
<th>GlasGrid + 2&quot; HMA Cost</th>
<th>Crack Delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Properly prepared surface + level-up on stable base Axle Load &gt;20kip</td>
<td></td>
<td>GlasGrid® 8511TF</td>
<td>$0.80 SF</td>
<td>2.0&quot;</td>
<td>$2.72 SF</td>
<td>$2.16 SF</td>
<td>Ultimate Crack Delay**</td>
</tr>
<tr>
<td>Properly prepared surface + level-up on stable base Axle Load &gt;20kip</td>
<td></td>
<td>GlasGrid® 8511</td>
<td>$0.67 SF</td>
<td>2.0&quot;</td>
<td>$2.72 SF</td>
<td>$2.03 SF</td>
<td>Max Crack Delay</td>
</tr>
<tr>
<td>Properly prepared surface on stable base ESALS &gt;1M &gt;5% Heavies</td>
<td></td>
<td>GlasPave® 50</td>
<td>$0.50 SF</td>
<td>2.0&quot;</td>
<td>$2.72 SF</td>
<td>$1.86 SF</td>
<td>Up to 6x Crack Delay Waterproof*</td>
</tr>
<tr>
<td>Properly prepared surface on stable base ESALS &lt;1M &lt;5% Heavies</td>
<td></td>
<td>GlasPave® 25</td>
<td>$0.28 SF</td>
<td>1.5&quot;</td>
<td>$2.37 SF</td>
<td>$1.64 SF</td>
<td>Up to 3.2x Crack Delay Waterproof*</td>
</tr>
<tr>
<td>Properly prepared surface on stable base ESALS &lt;300K &lt;1% Heavies</td>
<td></td>
<td>2&quot; HMA No Interlayer</td>
<td>$1.36 SF</td>
<td></td>
<td></td>
<td></td>
<td>Cracks Return 1&quot; per year or within 2 years, on average</td>
</tr>
</tbody>
</table>

*Installed on a stable base with failures repaired. Cost based on HMA at $110/ton or $6.11 SY/IN. or $0.68 SF/INCH.

A simplified quick reference. See full guidelines in the Pavement Reinforcement-Product Application Guide. Increased traffic capacity as listed in equivalent thickness of HMA pavement is dependent on ME/AASHTO design for each specific pavement. Added crack delay based on independent Texas Transportation Institute (TTI) testing. Moisture barrier based on FM S-565 permeability testing and Recyclability is based on independent AASHTO T283-07 test. Cost is relative average and varies so must be calculated by market and each job based on size, location, and project productivity. *Per FHWA NHI-07-092 Geosynthetics Engineering Pavement Overlays Aug 08 page 6-6 an interlayer that creates a waterproof membrane is equivalent to adding a 1.2" HMA overlay. ** 50% greater stress control in beam test than standard GG8511.

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**Why Just Mill & Fill or Overlay?**

**Add Performance to Existing Pavements by Designing with Reinforcement**

Rehabilitation design using reinforcement has a light footprint, but has a heavy impact on the following performance. The GlasGrid family of high tensile strength, low elongating elastomeric polymer coated paving reinforcing systems address the challenges of insufficient ESAL capacity in asphalt structures. These systems offer a cost-effective alternative to thicker asphalt overlays, which only resolves the ESAL capacity issue.

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**INCREASE ESAL CAPACITY BY 2 TIMES OR MORE**

**DELAY CRACKS UP TO 6 TIMES**

**CREATE MOISTURE BARRIER EQUIVALENT TO 1.2" OF HMA**

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**Let us work with you on a project to show you the design**

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